

Amendments to the Specification:

Please replace paragraph 53 with the following amended paragraph:

SM 12/13/07 ⁵³
[0001] In step 301, the process selects a pair of two LUTs from the netlist. At step 302, the process determines if the two selected LUTs have at least N common input signals in any order. Common input signals between the LUTs are identified and recorded. Any order of common input signals satisfies the requirement of decisional step 302. For example, if input signals IN1, IN3, IN4, and IN6 are common among input signals IN1-IN6, the requirement of step 302 is satisfied. If the pair of LUTs does not have at least N common input signals, the process proceeds to step 313. At step 313, the process determines if there are any more pairs of LUTs that have not been tested. If there are more LUT pairs to test, the process returns to step 301. If there are not any more LUT pairs to test, the process is done at step 314.